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09/618,988	07/18/2000	Scott C. Harris	SCH/BARCODE	1563

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EXAMINER

WALSH, DANIEL I

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,988

Applicant(s)

HARRIS, SCOTT C.

Examiner

Daniel I Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 18-23 and 30-60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 24-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-17 and 24-29, drawn to a barcode having two portions, where each portion contains data, classified in class 235, subclass 462.01.
 - II. Claims 18-23, drawn to scanning a bar code with two scanners to retrieve information, classified in class 235/462.10
 - III. Claims 30-39, drawn to forming a barcode to represent personal identification information converted to a string of digits of base N ($N > 10$), classified in class 235/462.09.
 - IV. Claims 40-54, drawn to forming a communication with a barcode forming supplemental information to the communication, classified in class 235/487.
 - V. Claims 55-60, drawn to reading a bar code using a camera device and processor, classified in class 235/462.11.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the barcode can be read without two scanners.

3. Inventions III and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the barcode can be formed without personal information containing a string of digits of base N.

4. Inventions IV and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the barcode can be formed without communication and communication supplemental data.

5. Inventions V and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the barcode can be read without a camera.

6. Inventions II, III, IV, and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions suggest different modes of operation to read/produce barcodes.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

8. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II-V, restriction for examination purposes as indicated is proper.

9. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

10. During a telephone conversation with Scott Harris on 2 January 2003 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-17 and 24-29. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-23 and 30-60 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 3-4 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it is unclear to the examiner how the second portion of the barcode can be found invalid/valid by only scanning the first bar code portion.

13. Claims 3-4 and 13 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP

§ 2172.01. The omitted steps are: the process of scanning the first portion of the barcode and how that results in a,invalidation of a second barcode portion.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 2, 5, 11, 12, 14, and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams (US 5,920,062).

Re claim 1, Williams teaches a barcode comprising a first barcode portion, which represents a first format barcode and is found as valid by a first bar code scanning process to provide first information, and a second barcode portion, formed in a second format which is different than the first format, but associated with the first format bar code portion, and the second bar code portion represents additional information beyond the first information provided by the first bar code portion through FIG. 2A, which shows a first barcode portion, through linear barcode section 30 that provides a first information, and second portion 40 of a 2D barcode format, that is associated with the first format and contains different but related and additional information from the first portion through “Linear bar code structure 30 maybe a UPC-A bar code containing twelve digits of information to identify a particular product... Two-dimensional bar code structure 40 can typically encoded up to thirty eight digits and/or control characters. It contains one hundred thirty six bits of data, seventy two bits of error correction,

four bits of format data, and six bits used in three vertical reference patterns making up a vertical reference distance identifier pattern 51...Two-dimensional bar code structure 40 has two rows but could have as many as sixteen rows" (col 3, lines 22+). This is interpreted to include additional but related/different information. Further, it is well known that barcodes are found valid by a scanning process (i.e.: valid codes are read and processed, invalid codes are not).

Re claim 2, Williams teaches that the second bar code portion is a two-dimensional bar code through FIG. 2A, which shows a second portion as 2D barcode section 40.

Re claim 5, as taught above, the second barcode portion is a 2D code, and inherently has information coded in two directions.

Re claim 11, Williams teaches the limitations that the barcode comprises a first barcode part containing first abbreviated information and a second barcode part containing second information, which has more information than the first, through FIG. 2A. where Williams teaches information encoded in two barcode formats through his combined linear and two-dimensional bar code structure where each part contains information encoded therein, as is well known in the barcode art. Williams also teaches that the second part (2-d bar code structure 40) has a greater quantity of information than the first part (linear) through "The advantage of two-dimensional bar code structures over linear one dimensional bar code structures is their ability to store significantly more information" (col 1, lines 32+) and "Linear bar code structure 30 maybe a UPC-A bar code containing twelve digits of information to identify a particular product...Two-dimensional bar code structure 40 can typically encoded up to thirty eight digits and/or control characters. It contains one hundred thirty six bits of data, seventy two bits of error correction, four bits of format data, and six bits used in three vertical reference patterns making up a vertical

reference distance identifier pattern 51... Two-dimensional bar code structure 40 has two rows but could have as many as sixteen rows” (col 3, lines 22+). Further, it is well known and accepted as taught above, that 2-d barcodes encode more data/have more data storage capacity than linear barcodes. Further Williams teaches two scanning processes to obtain both data because the scanner has to be moved to read both sets of encoded data, and therefore is interpreted to include 2 scanning processes since the two data formats are read separately, and cannot be read at the same time, due to their orientation.

Re claim 12, as discussed above, the first information is in a linear bar code portion 30, and the second information in a 2D portion 40.

Re claim 14, Williams teaches the linear barcode/first barcode is one of a UPC type, including a UPC-A type (see col 3, lines 22+).

Re claim 24, Williams teaches a bar code comprising a first part having information encoded in a first bar code format, and a second part having information encoded therein in a second format, different than the first format through FIG. 2A. Williams teaches information encoded in two barcode formats through his combined linear and two-dimensional bar code structure where each part contains information encoded therein, as is well known in the barcode art.

Re claim 25, Williams teaches that the second part (2-d bar code structure 40) has a greater quantity of information than the first part (linear) through “The advantage of two-dimensional bar code structures over linear one dimensional bar code structures is their ability to store significantly more information” (col 1, lines 32+) and “Linear bar code structure 30 maybe a UPC-A bar code containing twelve digits of information to identify a particular product... Two-

dimensional bar code structure 40 can typically encoded up to thirty eight digits and/or control characters. It contains one hundred thirty six bits of data, seventy two bits of error correction, four bits of format data, and six bits used in three vertical reference patterns making up a vertical reference distance identifier pattern 51... Two-dimensional bar code structure 40 has two rows but could have as many as sixteen rows" (col 3, lines 22+). Further, it is well known and accepted as taught above, that 2-d barcodes encode more data/have more data storage capacity than linear barcodes.

Re claim 26, Williams teaches that the information in the second part is related to the first part through "In the preferred embodiment, there is a relationship between each element 33 of two-dimensional bar code structure portion 40 and the modules of linear bar code structure portion 30" (col 3, lines 46+).

Re claim 27, as taught above, a second bar code portion is the 2-d barcode section, and the first portion is a linear barcode format.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 1, and further in view of Woodaman (US 6,270,724).

The teachings of Williams have been discussed above. Williams teaches the linear

barcode/first barcode is one of a UPC type, including a UPC-A type (see col 3, lines 22+).

Williams fails to teach that the second barcode portion is found invalid by the first barcode scanning process.

Woodaman teaches detection of contaminants in food, where a portion of a bar code is found invalid when scanning of a second portion identifies contamination (col 9, lines 15+) where it is taught that a second barcode portion can be read when contamination is present, and that at that point, the first barcode portion is obliterated so that a contaminated item is not scanned out for purchase. Thus, the barcode portion is found invalid by a scanning process when the contaminated bar code section is able to be scanned, since at that time the first barcode scanning portion is unscannable to indicate contamination (col 16, lines 25+) . Therefore, since the second barcode portion is only readable when the first barcode portion is obliterated, this is generally interpreted to meet the limitations that a barcode portion is found invalid when another portion is read.

Though Woodman doesn't teach that the barcodes are of different formats, and is silent as to which barcode contains additional information, at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Williams with those of Woodaman., to have a second barcode invalidated by a reading of the first barcode, since Woodaman teaches invalidating of a first barcode before a second barcode is to be read. Further, Williams establishes a basis for two format barcodes, which would be effective and functional and a matter of obvious design variation for the invention of Woodaman to provide different information. Further, it is well known that barcodes can be encoded with different amounts and type of information. Therefore, one would have been motivated to make

such a combination to provide a way of knowing that one barcode is invalid when a second barcode appears ready to be read. Though the physical act of invalidating a barcode portion by simply reading the other barcode portion has not been taught, it has been taught that a barcode portion is invalidated when another barcode portion is scannable, and this is generally interpreted to be functionally equivalent and serve the same purpose, which is to invalidate one portion, and validate another portion, so that only reading of correct/reliable information occurs.

17. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 1 above, and further in view of Ackley (US 6,478,223) and Paul et al. (US 6,457,651).

The teachings of Williams have been discussed above.

Williams fails to teach that the use of a color bar code.

Ackley teaches a color barcode that uses three or more colors and can be read by a conventional/simple scanner/reader (abstract).

Paul et al. teaches a dual information document barcoding where a second pattern of optically encoded indicia is printed integrally into the conventional bar code pattern (abstract). Specifically, Paul et al. teaches that the second pattern of indicia is different color through “multi-color printing and scanning can be used to enhance the distinction and readability of the second and higher level of information buried in the bar code. In addition, multi-color printing can be used to provide increased data density. For example, by using a very specific limited spectrum color for the glyphs in contrast to the typical black of the bar code pattern” (col 6, lines 29+).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Williams with those of Ackley and Paul et al.

One would have been motivated to do this to provide a way to distinguish the different information from the barcode and increase data density in a way that is well known and conventional in the art. Further, since a barcode label with two barcode formats has been taught, simply adjusting one of the formats to include a colored barcode, is well within the ordinary skill in the art, motivated by design variation to provide an alternate barcode format for storing data. Further, since such alternative formats have been taught as well known and obvious (see above) simply changing from one barcode format to another, would have been obvious since barcodes are known to store data, regardless of their format, and that changing a barcode format does not provide a novel and functionally unique barcode.

18. Claims 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 1 above.

The teachings of Williams have been discussed above. Re claim 7, Williams teaches that the second barcode portion represents a greater quantity of information than the first part through "The advantage of two-dimensional bar code structures over linear one dimensional bar code structures is their ability to store significantly more information" (col 1, lines 32+) and "Linear bar code structure 30 maybe a UPC-A bar code containing twelve digits of information to identify a particular product...Two-dimensional bar code structure 40 can typically encoded up to thirty eight digits and/or control characters. It contains one hundred thirty six bits of data, seventy two bits of error correction, four bits of format data, and six bits used in three vertical reference patterns making up a vertical reference distance identifier pattern 51...Two-

dimensional bar code structure 40 has two rows but could have as many as sixteen rows” (col 3, lines 22+). Further, it is well known and accepted as taught above, that 2-d barcodes encode more data/have more data storage capacity than linear barcodes. Re claim 8, Williams teaches that the additional information is related to the first portion through the teachings of claim 1 above, where it is understood that related is interpreted to include associated, as set forth in claim 1. Re claim 10, as taught above, it is understood that the additional information is supplemental information/additional information, to that included in the first barcode portion, since the first portion includes item information, it is understood that any information relating to the item is considered to be supplemental. Further, it is well known and obvious to store various types of data in barcodes, whether it be personal information, product description, prices, inventory information, age restriction information, etc. Therefore, at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to include supplemental /additional information, since such a process is well known and conventional in barcoding, and that the actual data stored is not patentable, since it is envisioned to be within the ordinary skill of the art to encode various data in barcode format.

Williams fails to teach that the barcode portions represent personal identification information.

Barcodes are well known in the art for being able to be encoded with various types of information, as discussed above, and as conventional in the art, barcodes provide the benefits of having predictable behavior, well understood manufacturing methodologies, and reliable results, as related to encoding and retrieving the encoded data. Therefore, it would have been within the ordinary skill of one in the art to encoded barcodes with any desired information, which can

include personal information, since barcodes providing personal information are well known such as credit cards, debit cards, passports, and is substantiated by a Rubin (US 4,476,381). Since it had already been discussed above to have two barcode formats, with one storing a greater quantity of data than the other, simplifying modifying the type of data to be stored on the barcode would have been an obvious matter of design variation.

19. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 1 above.

The teachings of Williams have been discussed above. Williams teaches that the second barcode portion represents a greater quantity of information than the first part and that the information is related/associated, and the second portion contains additional information (see claim 1). However, Williams is silent to if the second portion contains the same data.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to have overlapping /redundant information/data since it is well known in the art to encoded related information in a separate barcode portion. Simply specifying what information is encoded in a label would have been well within the ordinary skill in the art. Furthermore, since the two portions provide related information, it would have been obvious to have some information the same especially since Williams teaches that it is well known that first portions include primary production information and the 2d code contains secondary product information, it would have been well within the skill of one in the art, to have some of the information overlap, since they are both drawn to the same item. Therefore it would have been obvious to provide redundant data, since it is well known that different data can be encoded on barcodes,

and that providing secondary or supplemental data can also provide redundant data, such as storing the redundant item number.

20. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 11, and further in view of Woodaman.

The teachings of Williams have been discussed above. Williams teaches the linear barcode/first barcode is one of a UPC type, including a UPC-A type (see col 3, lines 22+).

Williams fails to teach that the second barcode portion is found invalid by the first barcode scanning process.

Woodaman teaches detection of contaminants in food, where a portion of a bar code is found invalid when scanning of a second portion identifies contamination (col 9, lines 15+) where it is taught that a second barcode portion can be read when contamination is present, and that at that point, the first barcode portion is obliterated so that a contaminated item is not scanned out for purchase. Thus, the barcode portion is found invalid by a scanning process when the contaminated bar code section is able to be scanned, since at that time the first barcode scanning portion is unscannable to indicate contamination (col 16, lines 25+) . Therefore, since the second barcode portion is only readable when the first barcode portion is obliterated, this is generally interpreted to meet the limitations that a barcode portion is found invalid when another portion is read; thus only one portion can be decoded/read.

Though Woodman doesn't teach that the barcodes are of different formats, and is silent as to which barcode contains additional information, at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Williams with those of Woodaman., to have a second barcode invalidated by a reading of the

first barcode, since Woodaman teaches invalidating of a first barcode before a second barcode is to be read. Further, Williams establishes a basis for two format barcodes, which would be effective and functional and a matter of obvious design variation for the invention of Woodaman to provide different information. Further, it is well known that barcodes can be encoded with different amounts and type of information. Therefore, one would have been motivated to make such a combination to provide a way of knowing that one barcode is invalid when a second barcode appears ready to be read. Though the physical act of invalidating a barcode portion by simply reading the other barcode portion has not been taught, it has been taught that a barcode portion is invalidated when another barcode portion is scannable, and this is generally interpreted to be functionally equivalent and serve the same purpose, which is to invalidate one portion, and validate another portion, so that only reading of correct/reliable information occurs.

21. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 11 above, and further in view of Oakeson et al. (US 6,398,117).

The teachings of Williams have been discussed above.

Williams fails to teach that the second information is in a gray scale of the bar code. Oakeson et al. teaches printing a barcode comprising the steps of obtaining a 1D barcode for an area, obtaining a 2D barcode, and combining the two codes in the area to overlap and printing the combination of the barcodes in an area of the medium (abstract). As seen through FIG. 1 and FIG. 2, the second information is in a gray scale of the bar code, interpreted to include the black and white of the barcode, hence embedded in the barcode itself.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Williams with those of Oakeson et al.

One would have been motivated to do this to provide an alternative, yet conventional and well-known barcode format, to store data. Further, having the second information in a gray scale of the bar code would have helped increase contrast for ease of reading and data density purposes.

22. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 11 above.

The teachings of Williams have been discussed above. Williams teaches that the second barcode portion represents a greater quantity of information than the first part through "The advantage of two-dimensional bar code structures over linear one dimensional bar code structures is their ability to store significantly more information" (col 1, lines 32+) and "Linear bar code structure 30 maybe a UPC-A bar code containing twelve digits of information to identify a particular product...Two-dimensional bar code structure 40 can typically encoded up to thirty eight digits and/or control characters. It contains one hundred thirty six bits of data, seventy two bits of error correction, four bits of format data, and six bits used in three vertical reference patterns making up a vertical reference distance identifier pattern 51...Two-dimensional bar code structure 40 has two rows but could have as many as sixteen rows" (col 3, lines 22+). Further, it is well known and accepted as taught above, that 2-d barcodes encode more data/have more data storage capacity than linear barcodes. Further, it is well known and obvious to store various types of data in barcodes, whether it be personal information, product description, prices, inventory information, age restriction information, etc. Therefore, at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to encode different information, since such a process is well known and conventional in barcoding,

and that the actual data stored is not patentable, since it is envisioned to be within the ordinary skill of the art to encode various data in barcode format.

Williams fails to teach that the barcode portions represent personal identification information.

Barcodes are well known in the art for being able to be encoded with various types of information, as discussed above, and as conventional in the art, barcodes provide the benefits of having predictable behavior, well understood manufacturing methodologies, and reliable results, as related to encoding and retrieving the encoded data. Therefore, it would have been within the ordinary skill of one in the art to encoded barcodes with any desired information, which can include personal information, since barcodes providing personal information are well known such as credit cards, debit cards, passports, and is substantiated by a Rubin (US 4,476,381). Since it had already been discussed above to have two barcode formats, with one storing a greater quantity of data than the other, simplifying modifying the type of data to be stored on the barcode would have been an obvious matter of design variation.

23. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 1 above, and further in view of Ackley and Paul et al.

The teachings of Williams have been discussed above.

Williams fails to teach that the use of a color bar code.

Ackley teaches a color barcode that uses three or more colors and can be read by a conventional/simple scanner/reader (abstract).

Paul et al. teaches a dual information document barcoding where a second pattern of optically encoded indicia is printed integrally into the conventional bar code pattern (abstract).

Specifically, Paul et al. teaches that the second pattern of indicia is different color through “multi-color printing and scanning can be used to enhance the distinction and readability of the second and higher level of information buried in the bar code. In addition, multi-color printing can be used to provide increased data density. For example, by using a very specific limited spectrum color for the glyphs in contrast to the typical black of the bar code pattern” (col 6, lines 29+).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Williams with those of Ackley and Paul et al.

One would have been motivated to do this to provide a way to distinguish the different information from the barcode and increase data density in a way that is well known and conventional in the art. Further, since a barcode label with two barcode formats has been taught, simply adjusting one of the formats to include a colored barcode, is well within the ordinary skill in the art, motivated by design variation to provide an alternate barcode format for storing data. Further, since such alternative formats have been taught as well known and obvious (see above) simply changing from one barcode format to another, would have been obvious since barcodes are known to store data, regardless of their format, and that changing a barcode format does not provide a novel and functionally unique barcode.

24. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 24 above, and further in view of Oakeson et al.

The teachings of Williams have been discussed above.

Williams fails to teach that the use of a matrix format barcode.

Oakeson et al. teaches printing a barcode comprising the steps of obtaining a 1D barcode for an area, obtaining a 2D barcode, and combining the two codes in the area to overlap and printing the combination of the barcodes in an area of the medium (abstract). Further, Oakeson et al. teaches "Multi-dimensional bar codes are also in use. For example, two-dimensional (2D) bar codes comprise stacked symbology or multi-row code. 2D bar code also refers to matrix code, which is formulated based on the position of black spots within a matrix. Each black element is the same dimension and it is the position of that element that codes the data" (col, lines), thus teaching that matrix format 2D barcodes are well known in the art, and could be applied to the current invention.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Williams with those of Oakeson et al.

One would have been motivated to do this to provide an alternative, yet conventional and well-known barcode format, to store data. Further, Oakeson et al. teaches the use of matrix format 2D barcodes. Therefore, it would have been an obvious matter of design variation to choose an alternative barcode format for storing data, since matrix formats are well known, conventional, and produce predictable results since they are an accepted barcode format to store data.

25. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, as applied to claim 24 above, and further in view of Ackley (US 6,478,223) and Paul et al. (US 6,457,651).

The teachings of Williams have been discussed above.

Williams fails to teach that the use of a color bar code.

Ackley teaches a color barcode that uses three or more colors and can be read by a conventional/simple scanner/reader (abstract).

Paul et al. teaches a dual information document barcoding where a second pattern of optically encoded indicia is printed integrally into the conventional bar code pattern (abstract). Specifically, Paul et al. teaches that the second pattern of indicia is different color through “multi-color printing and scanning can be used to enhance the distinction and readability of the second and higher level of information buried in the bar code. In addition, multi-color printing can be used to provide increased data density. For example, by using a very specific limited spectrum color for the glyphs in contrast to the typical black of the bar code pattern” (col 6, lines 29+).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Williams with those of Ackley and Paul et al.

One would have been motivated to do this to provide a way to distinguish the different information from the barcode and increase data density in a way that is well known and conventional in the art. Further, since a barcode label with two barcode formats has been taught, simply adjusting one of the formats to include a colored barcode, is well within the ordinary skill in the art, motivated by design variation to provide an alternate barcode format for storing data. Further, since such alternative formats have been taught as well known and obvious (see above) simply changing from one barcode format to another, would have been obvious since barcodes are known to store data, regardless of their format, and that changing a barcode format does not provide a novel and functionally unique barcode.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Goldsmith (US 6,479,016), Braginsky (US 5,869,828), Nethery, III (US 6,032,863), Rubin (US 4,476,381), and Nakamura (JP 10309860 A).

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel Walsh** whose telephone number is **(703)305-1001**. The examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**daniel.walsh@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set for the in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

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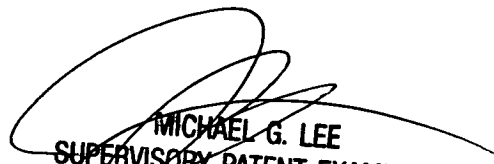
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